

DRAFT WORK PRODUCT



Borrego Valley Groundwater Basin Borrego Springs Subbasin Municipal Allocations

Projects and Management Actions

Project #2:

Water Conservation and Efficiency





March 29th, 2018



- Potential Water Savings & Cost
 - Preliminary, high level examples based on historical water usage and practices
 - Each potential project will be evaluated by cost, benefit, and feasibility
 - Conservation measures could easily amount to 25% of the estimated sustainable yield of the Borrego Springs Subbasin

Sector:	Potential Savings:	Approximate Cost: (per AFY/over 25 years)
Agriculture (Irrigation Efficiency)	264 AFY	\$382
Municipal (Outdoor)	315 AFY	\$339
Municipal (Indoor)	84 AFY	Variable
Recreation (Golf Courses)	674 AFY	\$128 - \$329
Total	1,337 AFY	\$128 - \$382

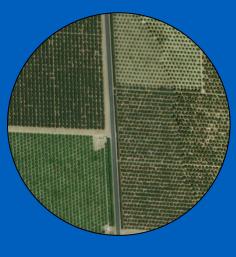
- Benefits of Comprehensive Conservation Program
 - Reduction of water use and ensured water reliability and affordability
 - Consistency with California Water Policy
 - Increased awareness of a critical resource
 - Customer participation and ownership
 - District commitment to efficient water use and Subbasin management
 - Municipal and recreational water use will be an increasingly larger percentage of overall water use as sustainability measures are implemented DUDEK

- Existing and Historical Conservation Programs
 - Incentivized water rate structure
 - Rebate Programs for water fixtures and appliances
 - Turf replacement with xeriscape (limited implementation)

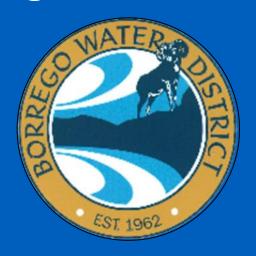


Project #2: Water Conservation and Efficiency

Water Savings Potential by Sector



Agriculture



Municipal



Recreation

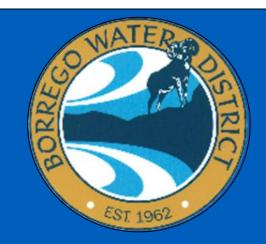


- Agricultural Sector
 - Modification of Irrigation systems and operations
 - Crop types
 - Irrigation Audits Report with recommendations
 - Potential Water Savings: Dependent on extent of utilization and degree of implementation
 - Possible Funding Sources: RCD, grants, land owner
 - Potential Savings (for citrus only)
 - 264 AFY
 - \$382/AFY over 25 years





- Municipal Sector (Outdoor)
 - 75% of water use is outdoors
 - Potential programs:
 - HOA Landscape Reductions
 - Potential water savings: 66 AFY
 - Approximate cost of water saved: \$339/AF over 25 years
 - HOA Irrigation Efficiency Improvements
 - Potential water savings: 26 AFY
 - Approximate cost water saved: \$1,200/AFY over 25 years

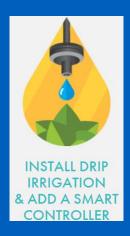




- Municipal Sector (Outdoors)75% of water use is outdoors
 - Other programs
 - Landscape Irrigation Audits
 - Smart Irrigation Controllers
 - Landscape Watering Calculator
 - Watering Index















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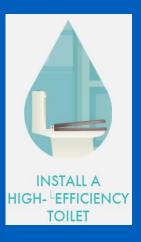
Municipal Sector (Indoor) 20% of water use is indoors





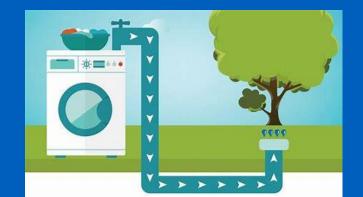






- Greywater Systems
 - Potential water savings: 40 gallons/person/day
 - 30% less fresh water used on landscape







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Recreational Sector

- Main Potential is for golf courses
- Potential Program:
 - Conversion of turf to native landscaping
 - Potential water savings: 471 AFY
 - Approximate cost of water saved: \$128/AF over 25 years
 - Irrigation System Management
 - Potential water savings: 203 AFY
 - Approximate cost: \$329AFY over 25 years





- Other Conservation Actions
 - Dedicated Conservation Coordinator
 - Conservation Webpage
 - California Water Efficiency Partnership
 - School Education Programs
 - Materials provided In Spanish







